

Amendments to the Claims:

Please amend claims 7 and 14 herein. Please cancel claims 8 and 15 without prejudice or disclaimer. Please add new claims 21-24. Please note that all claims currently pending and under consideration in the above-referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-6 (Canceled)

7. (Currently amended) A rocket motor, comprising:
an insulation material disposed between an inner surface of a case of the rocket motor and a propellant, the insulation material consisting essentially of a low-density ethylene propylene diene monomer polymer, ~~at least one flame retardant~~ ammonium polyphosphate, at least one silica, at least one a curing agent, an organic filler selected from the group consisting of polyvinyl chloride, polyphenylene sulfide, melamine, and a homopolymer of vinylidene chloride, and at least one additive selected from the group consisting of at least one antioxidant, at least one cure accelerator, at least one cure activator, at least one tackifier, and at least one plasticizer.

Claims 8-13 (Canceled)

14. (Currently amended) A method of insulating a rocket motor comprising:
producing an insulation material consisting essentially of a low-density ethylene propylene diene monomer polymer, ~~at least one flame retardant, at least one ammonium polyphosphate, at least one silica,~~ a curing agent, an organic filler selected from the group consisting of polyvinyl chloride, polyphenylene sulfide, melamine, and a homopolymer of vinylidene chloride, and at least one additive selected from the group consisting of at least one antioxidant, at least one cure accelerator, at least one cure activator, at least one tackifier, and at least one plasticizer; and
applying the insulation material to an inner surface of a case of the rocket motor.

Claims 15-19 (Canceled)

20. (Original) The method of claim 14, further comprising:
curing the insulation material to form an insulation layer positioned between the inner surface of the case of the rocket motor and a propellant.

21. (New) An insulation material for use in a rocket motor, consisting essentially of:
a low-density ethylene propylene diene monomer polymer;
ammonium polyphosphate;
at least one silica;
an organic filler selected from the group consisting of polyvinyl chloride, polyphenylene sulfide, melamine, and a homopolymer of vinylidene chloride;
a curing agent; and
at least one additive selected from the group consisting of at least one antioxidant, at least one cure accelerator, at least one cure activator, at least one tackifier, and at least one plasticizer.

22. (New) The insulation material of claim 21, further comprising carbon black.
23. (New) The rocket motor of claim 7, wherein the insulation material further comprises carbon black.
24. (New) The method of claim 14, wherein producing an insulation material comprises producing the insulation material further comprising carbon black.